IN THE CLAIMS

Please cancel Claims 62-64 without prejudice, amend Claim 61, and add new Claims 65-69 as follows:

1.-11. (Cancelled)

12. (Previously presented) A method of developing the specific protocol useful for delivery of content from a first node of a network to a second node thereof, the method comprising:

developing a first component adapted to communicate between said first and second nodes;

developing a second component adapted to process the content delivered to said second node;

developing a third component adapted to cooperate with at least one of said first and second components to enable a user to control functions of the playback of said content that are specific to said protocol;

assembling said first, second and third components into one or more applications configured to utilize said components; and

providing said one or more applications to said second node via at least one multiplex transport stream.

13. (Previously presented) The method of Claim 12, wherein said cooperation with at least one of said first and second components comprises accessing said first component to cause at least one message to be sent between said second node and said first node, said at least one message causing at least one corresponding function to be executed.

14. (Previously presented) The method of Claim 12, wherein said act of developing said first component comprises developing a Java DataSource.

15. (Previously presented) The method of Claim 14, wherein said act of developing said second component comprises developing a Java MediaHandler.

16. (Previously presented) The method of Claim 15, wherein said act of developing said third component comprises developing a controller adapted to access said first component

to cause at least one message to be sent between said second node and said first node, said at least one message causing at least one corresponding function to be executed.

17. (Previously presented) The method of Claim 14, wherein said act of developing a first component comprises developing a DataSource component further adapted to setup a session and handshake or negotiate conditional access parameters.

18. (Previously presented) The method of Claim 14, wherein said act of developing a first component comprises developing a DataSource component further adapted to specify the channel on which said content will be delivered.

19. (Previously presented) The method of Claim 12, wherein said act of developing a first component comprises adapting said first component to provide messaging in support of a plurality of functional modes in cooperation with said third component, said third component being adapted to provide said plurality of functional modes.

20. (Previously presented) The method of Claim 12, wherein said act of developing a second component further comprises developing a player component adapted for implementing said second component.

21. (Previously presented) Consumer premises equipment (CPE) adapted for operation within a content-based network, said CPE comprising at least one software application adapted for providing on-demand services to at least one user using at least one network-specific protocol, said at least one application comprising:

a first software component adapted to communicate between said CPE and another entity of said network;

a second software component adapted to process the content delivered to said CPE; and

a third software component adapted to cause at least one message corresponding to at least one function specific to said protocol to be sent to said entity of said network;

wherein said first, second, and third software components are selected from among sets of components developed by a headend entity of said content based network and provided to said CPE, said CPE being configured to assemble said first, second, and third software components into said at least one application via at least an editor application.

22. (Previously presented) The CPE of Claim 21, wherein said CPE comprises a DSTB with Java-based middleware, and at least one of said first, second and third components

of said at least one software application comprises at least one class and at least one interface disposed within the application directory hierarchy.

23. (Previously presented) The CPE of Claim 22, wherein said CPE is adapted to:

receive said at least one application over said network; and

subsequent to said receipt, launch said at least one application to configure at least one path to said at least one component.

24. (Previously presented) The CPE of Claim 23, wherein said CPE further comprises a plurality of applications, said plurality of other applications being enabled to access said at least one component via at least one of said at least one configured paths.

25. - 33. (Cancelled)

34. (Previously presented) A head-end apparatus adapted for providing a network-specific on-demand application to CPE of said network, the apparatus comprising:

at least one computer; and

at least one computer program adapted to develop a specific protocol useful in implementing said on-demand application according to the method comprising:

developing a set of first components adapted to communicate between said head-end and said CPE, said communication comprising:

establishing a communications session between said head-end and said CPE;

specifying to said CPE a channel on which on-demand content may be accessed by said CPE; and

sending or receiving at least one message regarding functional modes;

developing a set of second components adapted to process said on-demand content delivered to said CPE; and

developing a set of third components adapted to cooperate with at least one of said first and second components to control said functional modes specific to said on-demand application;

wherein each component of said set of first components, said set of second components, and said set of third components is associated with different multiple systems operator (MSO) environments; and

wherein, in response to a request for a particular application within a given MSO network, assembling and delivering individual ones of said set of first components, said set of second components, and said set of third components associated with said given MSO.

35. (Previously presented) The CPE of Claim 21, wherein said CPE is further adapted to:

receive said at least one application;

store said at least one application within a storage device of said CPE; and

run said application to configure said CPE according to a network-specific protocol implemented by said at least one application.

36. (Previously presented) The CPE of Claim 21, wherein said at least one application comprises an application configured with a network-specific protocol extension and wherein said CPE is further adapted to selectively allow a plurality of applications resident on said CPE to access said extension.

37. (Previously presented) A storage apparatus comprising a computer readable medium, said medium comprising at least one computer program having a plurality of instructions which, when executed by a computer, implement a pre-existing and network-specific protocol having at least one extension thereof, the at least one computer program comprising:

a first module for communication between a first and second node of said network;

a second module for processing content delivered to said second node of said network; and

a third module for controlling at least one of said act of communicating and said act of processing, said third module being adapted to understand said extension, said act of controlling enabling said content to be presented according to one or more requested functional modes available to said network-specific protocol based at least in part on said extension.

38. (Previously presented) The apparatus of Claim 37, wherein said controlling comprises causing at least one message to be sent between said second node and said first node, said at least one message causing at least one corresponding function to be executed.

39. (Previously presented) The apparatus of Claim 37, wherein said communication between said first and second node of said network comprises utilizing a Java DataSource.

40. (Previously presented) The apparatus of Claim 39, wherein said processing content delivered to said second node comprises utilizing a Java MediaHandler.

41. (Previously presented) The apparatus of Claim 40, wherein said controlling comprises utilizing a controller adapted to cause at least one message to be sent between said second node and said first node, said at least one message causing at least one corresponding function to be executed.

42. (Previously presented) The apparatus of Claim 39, wherein said communication between said first and second node of said network comprises utilizing a DataSource component further adapted to setup a session and handshake or negotiate conditional access parameters.

43. (Previously presented) The apparatus of Claim 39, wherein said communication between said first and second node of said network comprises utilizing a DataSource component further adapted to specify the channel on which said content will be delivered.

44. (Previously presented) The apparatus of Claim 37, wherein said communication between said first and second node of said network comprises providing messaging in support of a plurality of functional modes; and wherein said controlling comprises providing said plurality of functional modes.

45. (Previously presented) The apparatus of Claim 37, wherein said processing content delivered to said second node of said network further comprises utilizing a player component adapted to perform said processing.

46. (Previously presented) Customer premises equipment (CPE) adapted for operation within a content based network offering on-demand services according to at least one network-specific protocol, said CPE comprising:

a storage device; and

a digital processor operatively coupled to said storage device, said digital processor adapted to run at least one software application stored on said storage device, said software application comprising a plurality of components adapted to, when executed on said processor:

communicate between said CPE and another entity of said network;

process the content delivered to said CPE; and

enable a user of said CPE to control, via a user interface, playback of said content according to said network-specific protocol;

wherein said software application is adapted to be utilized by more than one application having permissions from an OCAP monitor and simultaneously running on said CPE.

47. (Previously presented) The CPE of Claim 46, wherein said CPE comprises a digital settop box (DSTB) with Java-based middleware, and said at least one software application comprises at least one class and at least one interface disposed within the application directory hierarchy.

48. (Previously presented) The CPE of Claim 47, wherein said CPE is adapted to:

receive said at least one application over said network; and

subsequent to said receipt, launch said at least one application to configure at least one path to said at least one component.

49. (Previously presented) The CPE of Claim 48, wherein said CPE further comprises a plurality of applications, said plurality of other applications being enabled to access said at least one component via at least one of said at least one configured paths.

50. (Previously Presented) A method of developing the specific protocol useful for delivery of content from a first node of a network to a second node thereof, the method comprising:

developing a plurality of media interface components adapted to implement a network-specific protocol;

developing a configured application by disposing said plurality of components within a software application; and

developing at least one path to said media interface components, said path being accessible only to authorized entities;

wherein said at least one path and said media interface components cooperating to provide network specific on-demand services.

51. (Previously presented) The method of Claim 50, wherein said configured application is run on a CPE.

52. (Previously presented) The method of Claim 51, wherein said act of developing a plurality of media interface components comprises developing a plurality of Java Media Framework components.

53. (Previously presented) The method of Claim 52, wherein said act of disposing said plurality of media interface components comprises disposing a plurality of classes and interfaces within the directory hierarchy structure of said application.

54. (Previously presented) The method of Claim 51, wherein said act of disposing said plurality of media interface components comprises:

providing said components to said CPE;

providing said software application to said CPE; and

assembling said configured application at said CPE using at least said components and said software application.

55. (Previously Presented) The CPE of Claim 21, further comprising a user interface, said user interface adapted to enable a user to direct said sending of said at least one message.

56. (Previously Presented) The CPE of Claim 21, wherein said act of sending said message causing said corresponding function to be executed.

57. (Previously Presented) The head-end apparatus of Claim 34, wherein said first component comprises a Java DataSource.

58. (Previously Presented) The head-end apparatus of Claim 57, wherein said second component comprises a Java MediaHandler

59. (Previously Presented) The head-end apparatus of Claim 58, wherein said third component comprises a controller adapted to access said first component to cause said at least one message to be sent between said head-end and said CPE, said at least one message causing at least one corresponding functional mode to be invoked.

60. (Previously Presented) The head-end apparatus of Claim 34, wherein said act of developing a second component further comprises developing a player component adapted for implementing said second component.

61. (Currently amended) A storage apparatus comprising a computer readable medium, said medium comprising at least one computer program having a plurality of

instructions which, when executed by a computer, implement a pre-existing and network-specific protocol, the at least one computer program comprising:

a first module for upstream and downstream communication between a CPE and a headend entity of an HFC network, said first module having at least one extension thereof;

a second module for processing content delivered to said ~~second node~~ headend entity of said HFC network; and

a third module for controlling at least one of said communication and said processing, said third module being adapted to understand said extension;

wherein said controlling comprises enabling said content to be presented utilizing one or more functional trick modes available to said network-specific protocol based at least in part on said extension.

62. – 64. (Cancelled)

65. (New) The storage apparatus of Claim 61, wherein said controlling comprises causing at least one message to be sent between said headend entity and said CPE, said at least one message causing at least one corresponding function to be executed.

66. (New) The storage apparatus of Claim 61, wherein said communication between said CPE and said headend entity of said network comprises utilizing a Java DataSource, and said processing content delivered to said headend entity comprises utilizing a Java MediaHandler.

67.(New) The apparatus of Claim 66, wherein said controlling comprises utilizing a controller adapted to cause at least one message to be sent between said headend entity and said CPE, said at least one message causing at least one corresponding function to be executed.

68. (New) The apparatus of Claim 61, wherein:

said communication between said CPE and said headend entity of said network comprises providing messaging in support of said one or more functional trick modes; and

said controlling comprises providing said one or more functional trick modes.

69. (New) The apparatus of Claim 61, wherein said processing content delivered to said headend entity of said network further comprises utilizing a player component adapted to perform said processing.